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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/762,338	01/23/2004	Takayuki Matsuzuka	402948	4957

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EXAMINER

CHANG, JOSEPH

ART UNIT PAPER NUMBER

2817

DATE MAILED: 08/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/762,338

Applicant(s)

MATSUZUKA, TAKAYUKI

Examiner

Joseph Chang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) 3-8 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-8 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 1/23/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Election/Restrictions

Applicant's election with traverse of Claims 1 and 2 drawn to species 2 filed 7/22/05 is acknowledged. The traversal is on the ground(s) that "the close relationship between the two independent claims 1 and 5 ... Thus, examination of claim 1 is going to result in a search of the same art that would have to be searched to examine claim 5. Thus, the imposition of the species election requirement is inappropriate". This is not found persuasive because the non-obvious variants between each of the species present a burden in both search and examination. Species 2 (Figure 4) shows a diode section placed at the output of the transistor, whereas Species 5 (Figure 9) shows a diode section placed at the input of the transistor. Each of these features is a non-obvious variant from the others.

Claims 3-8 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement filed 7/22/05. The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shiga, US Patent No. 5,309,119 in view of Yeh, US Pub. No. 20040095198 A1.

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Shiga discloses Figures 1-4 a semiconductor IC device (1) comprising: a resonant circuit (10), a transmission line (between 10 and 11) connected a first end (left side) of the transmission line connected to the resonant circuit (10); an active element (11) having a first (gate), a second (source) which is grounded through a reactance element (13, 18, and TL); a third (drain) electrodes; an output-matching circuit (15); a substrate (1, Figure 1).

However, a diode section is not shown in the output-matching circuit as recited in the claim.

As would have been recognized by one of ordinary skill in the art, such diode or a varactor is for adjusting capacitance to tune a desired impedance matching circuit, for example, Yeh showing D2 in 400 of Figure 2, a bandpass filter.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time of the invention to used a varactor (diode) for adjusting capacitance to tune a desired impedance matching circuit as taught by Yeh.

Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shiga, US Patent No. 5,309,119 in view of Higashiyama et al., US Patent No. 5,225,793.

Shiga discloses Figures 1-4 a semiconductor IC device (1) comprising: a resonant circuit (10), a transmission line (between 10 and 11) connected a first end (left side) of the transmission line connected to the resonant circuit (10); an active element (11) having a first (gate), a second (source) which is grounded through a reactance

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element (13, 18, and TL), a third (drain) electrodes; an output-matching circuit (15); a substrate (1, Figure 1).

However, a diode section including a plurality of diodes connected in an inverse parallel arrangement is not shown in the output-matching circuit as recited in the claim.

As would have been recognized by one of ordinary skill in the art, such diodes or a limiter is for adjusting levels of output oscillation signal to tune a desired output levels, for example, Higashiyama et al. showing 6 of Figure 1 (Col. 3, lines 5-12), a limiter.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time of the invention to used a limiter (diodes) for adjusting levels of output oscillation signal to tune a desired output levels as taught by Higashiyama et al.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Torizuka et al. show a FET oscillator as recited in the claim except a TL and diodes.

Grace et al shows a multiple tune oscillator as recited in the claim except a TL.

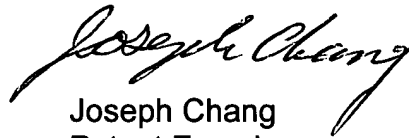
Miya et al. shows a microwave oscillator as recited in the claim except a TL.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Chang whose telephone number is 571 272-1759. The examiner can normally be reached on Mon-Fri 0700-1730.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pascal can be reached on (571) 272-1769. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Joseph Chang
Patent Examiner
Art Unit 2817